

# 1. ISSUES AND OPPORTUNITIES

The Study Committee, working with Community Development Department staff, consultants, and neighborhood residents, explored a wide range of issues and opportunities. Beyond the core concerns around zoning, development options and traffic, suggestions for other potential neighborhood enhancements came to the Committee's attention. Individual committee members' opinions sometimes diverged from those of others. In general, however, a strong majority of members reached agreement on most points, although residents and the Harvard University representative (land owner) often disagreed on the recommendations for parcels owned by Harvard University.

The Committee developed the set of goals found at the end of this chapter. They are general in nature and, while not specifically addressing each issue or opportunity, they reflect an overall vision for the neighborhood shared by a substantial majority of the Committee members.

**1.1 Character and Scale.** Each of the sub-areas in Riverside has its own particular character and scale. In Harvard Square there are typically three-to-four story business blocks with no side or front yards. In the Mass. Ave. Corridor building sizes are quite varied. Central Square is a classic early 20th century commercial core. The Harvard Dorms sub-area includes two distinct building types, the



*Figure 1.1 Character and scale of Residential Core*

lower red brick U-shaped River Houses and the later high rises. The character and scale of the Riverside's Residential Core is established by the regular rhythm of its small individual buildings, most with shallow front yards and more generous back yards. (See Figure 1.1: Character and scale of Residential Core.)

Riverside residents place high value on the existing character and scale of the Residential Core and are concerned that its qualities are being threatened, by present and possible future development. The Committee has, therefore, focused more on the character and scale of the Residential Core than on other sub-areas.

The Residential Core has already experienced changes to the original fabric, beginning in

1953 with Putnam Gardens. Putnam Gardens was followed by Leverett Towers and New Quincy House in 1958; Harvard's Peabody Terrace in 1963; and Mather House in 1967. During the 1970s and 80s a number of multi-story apartment buildings were constructed between Green Street, Western Avenue, Mt. Auburn Street and Hancock Street. (See Figure 1.2: High-rise apartment house on Franklin Street.)

There are very few developable parcels in Riverside and even fewer multiple, contiguous parcels. Nevertheless, existing zoning would allow very large buildings in portions of the Residential Core (up to 120' in height, with an FAR of 3) and it is conceivable that development pressures could increase to the point that acquisition and demolition of existing small residential buildings might occur. Many members of the Committee are concerned that under present zoning, the vacant and underutilized parcels owned by Harvard University will not be developed in a manner that is compatible with the historic fabric. The Harvard-owned sites are discussed in detail in Sections 1.10, 1.11 and 1.12.

**1.2. Housing.** The Committee values and supports affordable housing, home ownership, more families with children and economic and racial diversity. Most recently constructed units, however, are expensive to rent or own.

The Committee discussed the development of affordable housing in Riverside using Cambridge's incentive inclusionary zoning. (For a description of this article refer to Appendix B.) For projects with ten units or more and over 10,000 sf of floor area this ordinance requires 15% of the units to be affordable. The type and scale of residential building that the committee favors in Riverside would contain only approximately 3000 sf of floor area and two to three units. Smaller residential buildings of this size do not trigger the inclusionary zoning require-



*Figure 1.2 High-rise apartment house on Franklin Street*



*Figure 1.3 Young Riverside family*

ment. Most Committee members do not think the trade off of scale and the changes to the character of the neighborhood that would be necessary to achieve affordable units through inclusionary zoning is desirable and they prefer to pursue the addition of affordable housing by other means.

Committee members expressed their concern about additional undergraduate housing in the neighborhood. Cambridge's Citywide Growth Policy Document calls for the major educational institutions "... to provide housing for their respective faculties, students and staff through additions to the city's inventory of housing units." The policy calls for housing that matches the "... scale, density and character of the neighborhood." It does not, however, differentiate between housing for faculty, staff, graduate students and undergraduate students. Many Riverside residents find the undergraduate life style incom-

patible with a family-oriented neighborhood. They would, however, welcome faculty and staff as residents, in housing designed to be functionally and visually an integral part of the neighborhood. Committee members strongly recommend the university develop within its campus.

**1.3 Commercial.** The Riverside Neighborhood has a wide range of commercial uses, from the high yield establishments at Harvard Square to the small "mom-and-pop" stores on River Street and Western Avenue. Harvard Square is a major destination commercial center, Central Square is successfully reinventing itself, and the Mass. Ave. Corridor continues to be a viable location for furniture and other specialty goods. These areas were largely viewed as peripheral to the core neighborhood and did not receive a great deal of the Committee's attention. The Committee focused instead on the issue of "mom-and-pop" stores and their relationship to the Residential Core.

The primary concern in relation to "mom-and-pop" stores was that the siting and massing of any new such stores be compatible with nearby residential structures. For this reason a building type with its ground floor built to the front and side property lines was rejected in favor of buildings with front, side and rear yard setbacks similar to those of nearby residential buildings. Because the "mom-and-pop" stores are envisioned as serving walk-in customers, Committee members did not favor provision of dedicated parking for customers.

**1.4 Open Space/Community Facilities.** Riverside residents, like residents of other dense neighborhoods, treasure parks and open space. Many residential units in Riverside have no private open space, other than perhaps a deck or balcony. Back yards are either dedicated to the first floor occupants or shared.

The Charles River and its related parkland



*Figure 1.4 Charles River Park*



*Figure 1.5 Example of a riverfront link*

have special meaning for Riverside residents. For long-time residents, the riverfront is viewed as open space that is essentially an extension of the neighborhood. Over the years the connection has become more tenuous as a result of dormitory construction and increased volumes and speeds of traffic on Memorial Drive. The majority of Committee members do not want future development along Memorial Drive that either physically or psychologically creates a barrier between the Residential Core and the river. Improved pedestrian access to the riverfront is desired. The Committee advocates streetscape designs that visually and functionally reinforce the pedestrian realm leading to the parkland along the river. (See Figure 1.5: Example of riverfront link.) The Committee also sees the need for improved maintenance of the riverfront parkland and the Charles River bridges. Though the parkland and bridges are the responsibility of the



MDC, the City of Cambridge and its residents could work collaboratively with the MDC to plan for improvements, such as is being done at Magazine Beach.

During the course of the study, the Committee also discussed the need for a larger view of the riverfront, one that might result in an overall vision for the Cambridge riverfront that could be adopted by other riverfront neighborhoods. A similar concept was put forward in the 1992 study, which recommended a parkway district to protect the Charles River bank from intrusion. The Committee considers that design guidelines and criteria to regulate future development along Memorial Drive could be important tools to protect the special character that a riverfront location offers.

In March 2000 the City issued the Report of the Green Ribbon Open Space Committee. This 17-member committee, appointed by the City Manager, inventoried different park types and areas in the city that do not have access to each park type. They also analyzed the amount of public open space within one-quarter mile of every 1000 persons. With regard to the Riverside Neighborhood the report includes these findings:

- The Central Square area was rated high priority for a neighborhood park
- King School was rated high priority for an elementary school park (implemented in 2002)
- Tot lots were needed in Central Square and Harvard Square
- Three multi-purpose playing fields were needed in the eastern half of the city
- More emphasis on open space designed for passive uses was appropriate throughout the city

These findings reflect the Green Ribbon Open Space Committee's charge to identify under-served areas of the city and are not meant to imply that additional open space would not be a welcome addition to any neighborhood.



*Figure 1.6 Example of sidewalk as open space*

In dense urban areas like Riverside, sidewalks also function as open space. They allow for light and air to adjacent buildings. Sidewalks double as meeting places for teens and adults. Sidewalks also provide pedestrian and bicycle connections to schools, parks and shopping. Recent improvements in Central Square, where sidewalks have become extensions of cafes and restaurants, illustrate their potential for recreational use. In Riverside, Western Avenue and River Street, in particular, offer similar opportunities in selected locations. (See Figure 1.6: Example of sidewalk as open space.)

The recent addition of the retail area on River Street makes it possible for many Riverside residents to accomplish routine shopping trips on foot or bicycle. With creative streetscape design an enhanced pedestrian link through the neighborhood could connect a portion of the Residential Core to this center as well as to Harvard Square. This "Neighborhood Spine" could run along Banks Street from Harvard Square to Western Avenue shifting to Blackstone Street south of Western. (See Figures 1.7: Potential Neighborhood Spine; 1.8: Potential Neighborhood Spine at Putnam Avenue; 1.9: Potential Neighborhood Spine at Peabody Terrace; 1.10: Potential Neighborhood Spine at parking lot; 1.11: Potential Neighborhood Spine at Blackstone Street.) North of Western, one section would follow an exist-



Figure 1.7 Potential Neighborhood Spine



Figure 1.8 Neighborhood Spine at Putnam Avenue

ing public walkway through Peabody Terrace. In the block directly north of Western an easement would be required through what is currently a Harvard parking lot. The Neighborhood Spine could be identified by pedestrian-scale paving, lighting and landscape treatment.



Figure 1.9 Neighborhood Spine at Peabody Terrace

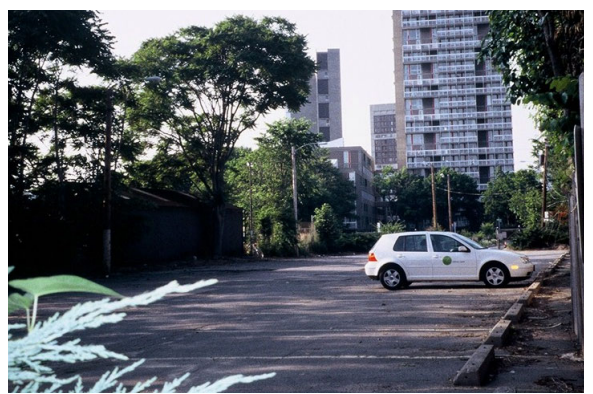


Figure 1.10 Neighborhood Spine at parking lot



Figure 1.11 Neighborhood Spine at Blackstone Street

The principal community facilities in Riverside are King School, Moore Youth Center at Hoyt Field, Corporal Burns Park, Riverside Press Park, and the Cambridge Community Center. At the outset of the planning process residents expressed concerns about the condition of both the building and the grounds at King School. The

playground has recently been redesigned and reconstructed. Residents also noted that the non-profit Cambridge Community Center was in need of capital improvements, and the Corporal Burns Park building is underused and in need of renovation. There are several churches in Riverside that serve the neighborhood.

### **1.5 Institutional Development and**

**Expansion.** Many members of the committee view Harvard's potential expansion of its facilities into the Residential Core and along the Charles River as a threat to the identity and viability of the neighborhood. Some residents "...do not want to feel as if they are living on the Harvard campus..." Some residents were apprehensive that, as a result of continued Harvard expansion along the riverfront and in Allston, the river would effectively become part of the campus. (See Figures 1.12: Existing land use and 1.13: Property owned by Harvard University.) It is also the opinion of the majority of the Study Committee that Harvard's ownership of 267 acres in Allston could relieve some of the pressure Harvard has felt in the past to expand its campus into the Riverside neighborhood.

A half-block area bordered by Cowperthwaite, Banks and Grant streets, considered by residents to be a part of Riverside's Residential Core, is located within the Institutional Overlay District. Issues related to Harvard's development plans for this area and the block to the north are discussed below in Section 1.12. The other two Harvard-owned sites that underwent special scrutiny by the Committee - Mahoney's and NStar - are located outside the Institutional Overlay District, and are in zoning districts for which the overlay district provisions do not apply. Issues related to these special sites are also discussed below, in Sections 1.10 and 1.11.

### **1.6 Parcel Size/Development Potential.**

Parcels in Riverside are typically 40' to 50' wide and 90' to 100' deep. If the present dimensional requirements were applied to the historic residential fabric in Riverside virtually all structures would be non-conforming. The principal difference between historical development patterns and existing dimensional requirements is in the side yard setback. Vintage residential structures are typically set back only 5' from the side property line whereas today setbacks are typically 7.5 to 10 feet. (See Figure 1.14: Typical building pattern in Riverside.)

Because of Cambridge's requirement for on-site residential parking, there would, in most cases, be a driveway on one side of a residential structure.

Following adoption of the Townhouse Ordinance in 1976, a number of townhouse projects were developed in Riverside. Though only slightly higher than Riverside's historic residential structures, these townhouse developments typically break the established rhythm of freestanding buildings. A majority of the members of the Committee felt that it was inappropriate for townhouses to be subject to less stringent dimensional requirements than other building types and supported changes to the Townhouse Ordinance. Given current real estate values, the Townhouse Ordinance no longer serves as an incentive for the creation of moderate-income housing.

**1.7 High Water Table/Drainage.** Riverside residents periodically experience flooded basements and in many cases have been unable to determine the cause. Suspected causes have included the City's storm and sanitary drainage systems and new construction.

Only portions of Riverside have separate sewer and storm drainage systems. Significant storms can cause back-up in the systems. Exact analysis of a basement flood-



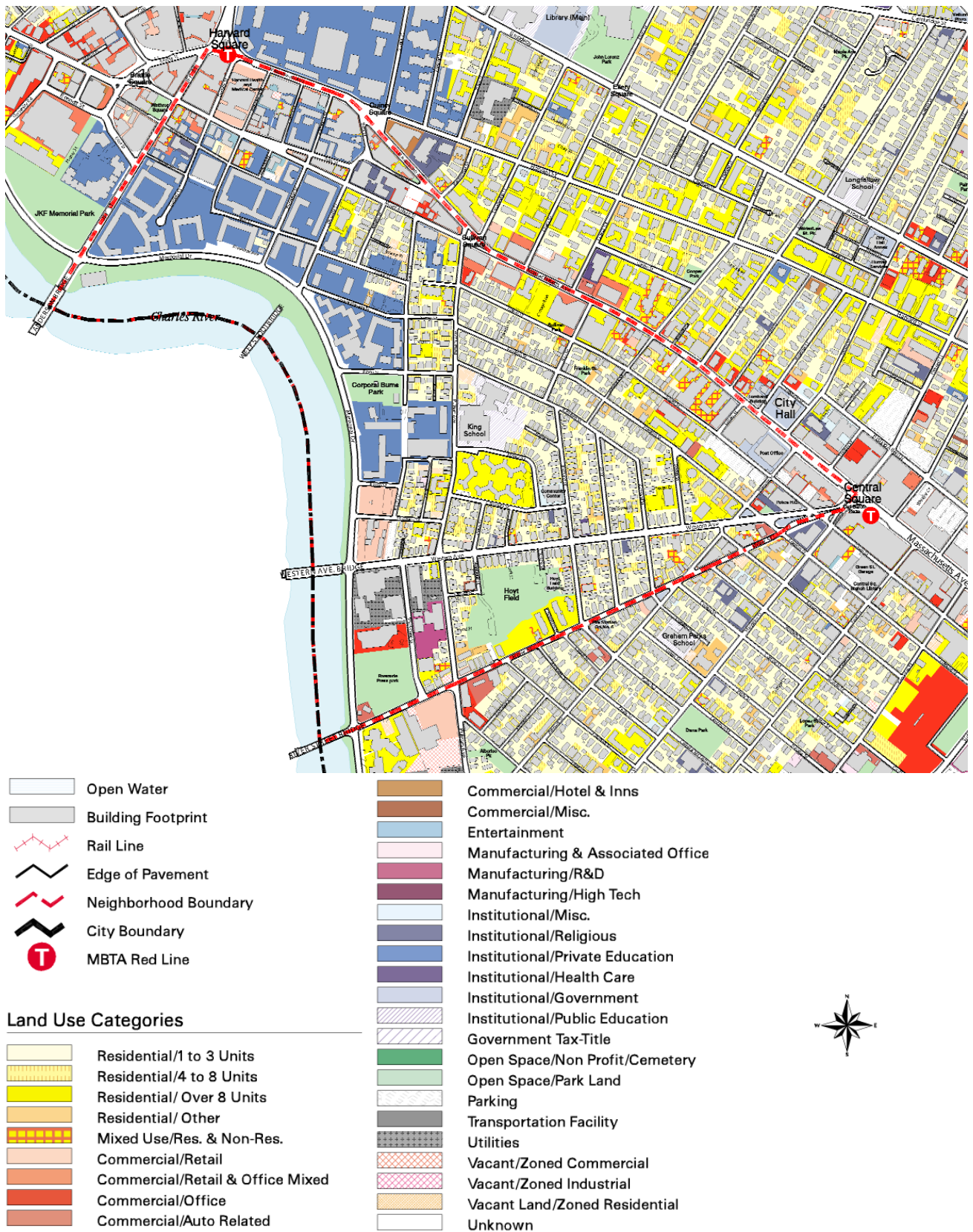


Figure 1.12 Existing land use



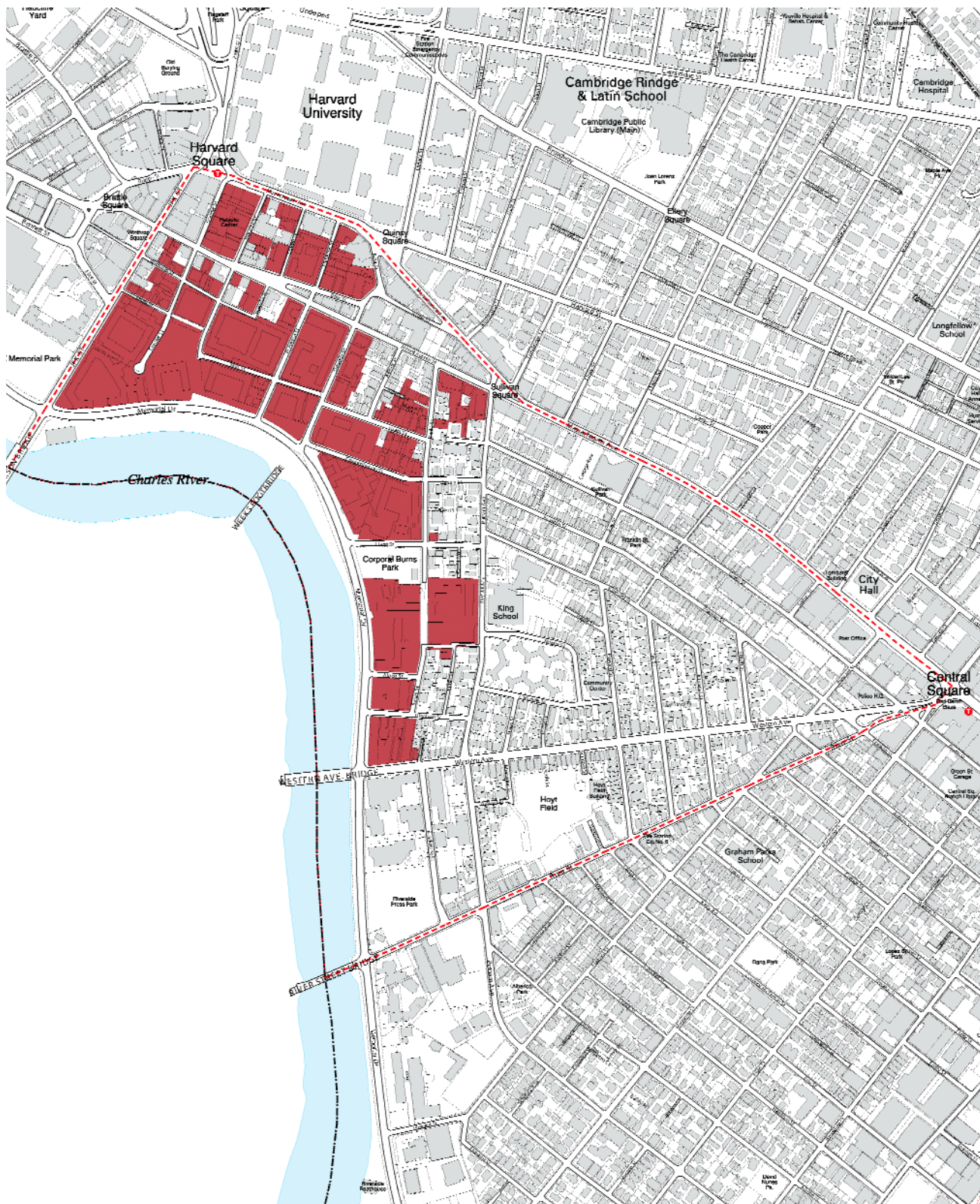


Figure 1.13 Property owned by Harvard University



ing problem must be on a case-by-case basis. The water table in Riverside is high and fluctuates two-to-three feet each year. Basement space must be designed and constructed to withstand water pressure and infiltration. For this reason, below-grade parking, or any other below-grade use, is very expensive to build.

The City now has in place design and construction regulations that preclude ground water impacts on adjacent properties due to construction activity.

**1.8 Traffic.** The Riverside Neighborhood experiences significant traffic impacts. Memorial Drive is in effect a major regional arterial. River Street and Western Avenue serve as primary connectors from the Mass Pike to all of Cambridge, Somerville and other towns to the north. Through traffic also finds its way onto Riverside's residential streets, primarily Putnam Avenue, which leads from River Street to Harvard Square, and other neighborhood streets.

Two suggestions were put forward as mitigation for through traffic: (1) traffic calming and (2) improved pedestrian crossings. Committee members also stressed the need to consider traffic impacts when evaluating proposed development in and near Riverside.

Residents at the Visioning Session noted the adverse impacts of truck traffic on River and Pleasant streets. They were particularly concerned about trucks carrying hazardous materials. The City is participating in a regional truck study with the Mass. Highway Department to address these issues. (See Figure 1.15: Traffic on River Street.)

**1.9 Parking.** Riverside residents often find it difficult or impossible to locate on-street parking in the neighborhood. One focus of the Committee's discussion was what role, if any, Harvard students and affiliates play in creating and/or exacerbating the parking problem. Harvard undergraduates are not



*Figure 1.14 Typical building pattern in Riverside*



*Figure 1.15 Traffic on River Street*

allowed to have cars in Cambridge. Graduate students, faculty and staff living in Harvard-owned or private housing who own cars are currently entitled to resident parking permits (one per car) and visitors' parking permits (one per household). Dormitory residents are not entitled to visitor permits. Residents of Peabody Terrace can rent parking spaces in the Peabody garage. Despite an opinion to the contrary from the City Solicitor, the majority of the Committee believes that the City can and should deny resident and visitor permits to students living in university dormitories, and has requested the Department of Traffic and Parking to pursue this possibility.

The Committee strongly urges that future development in and around the neighborhood not aggravate the demand for on street parking. (See Figure 1.16: Double parking on

Western Ave.) See Section 2.3 for a fuller discussion of transportation issues.

**1.10. 870-888 Memorial Drive (Mahoney's Site).** The Mahoney's site has been owned by Harvard University since 1927 and occupied by a garden center since 1950. As the last developable riverfront site remaining in the Riverside Neighborhood, it generated extensive debate in the Committee's meetings. (See Figures 1.17: Mahoney's site and 1.18: Aerial view of Mahoney's site.)

The site comprises the entire block bounded by Memorial Drive, Akron Street, Banks Street and Hingham Street and the eastern portion of the block bounded by Memorial Drive, Hingham Street, Putnam Avenue and Western Avenue. The North Block is approximately 30,000 sf in area and the South Block (including the parking lot) approximately 64,000 sf. Both are presently zoned C -3, which allows buildings up to 120' high and an FAR of 3. Residential and institutional uses are allowed. The site is located outside the Institutional Overlay District, and as a C -3 District, restrictions on Institutional uses do not apply.

The site is subject to the Commonwealth's Chapter 91 regulations (described in Appendix B). These regulations would limit heights of buildings to 55 feet within 100 feet from the riverbank, stepping up at a ratio of two feet of height for each foot away from Memorial Drive. The 100' line lies in the front portion of the parking lot.

Many Riverside residents find the garden center an asset to the neighborhood and would be in favor of it remaining there indefinitely. Members of the Committee have proposed that the City purchase the site and develop it as a park, or, alternatively, that Harvard donate the site to the City (or possibly a combination of these actions). In discussions of how open space on the site would be used, a majority of Committee members' stated preference was for passive



*Figure 1.16 Double parking on Western Ave.*



*Figure 1.17 Mahoney's site*



*Figure 1.18 Aerial view of Mahoney's site*

uses. Specific suggestions included a sculpture park, horticultural uses and a place for community gatherings and outdoor performances. Harvard, however, is exploring options for developing the site for University use. In July 2001 the University provided the Committee with a proposal to construct a two-part museum on the site. The University



recently withdrew the proposal and is now investigating housing options instead.

The Mahoney's site is not well served by public transit. The closest T station is at Central Square, a twelve-minute walk (.6 miles). Nearby buses on Western Avenue and River Street run on an average of every 20 minutes. Any office development would very likely need to provide for significant parking on-site.

The vision for future development of the Mahoney's site shared by the majority of Committee members can be summarized as follows:

- Future development should incorporate a large percentage of publicly accessible open space.
- The open space should include a primary space that is generously proportioned and highly visible, rather than residual strips of lawn.
- The primary open space should be located adjacent to Memorial Drive and Western Avenue
- Building(s) should be limited to two-to-three stories
- Building uses should be limited to residential and institutional, but not include undergraduate dormitories
- Visual and functional access to the river front should be enhanced
- Building service should not negatively impact the neighborhood
- The development should not add to the demand for on-street parking
- Traffic impacts should be minimized

(See Figures 1.19: Open space and institutional use; 1.20: Open space and housing and 1.21: Example of open space use.)

**1.11. NStar Site.** The NStar site includes portions of two blocks: one bounded by Memorial Drive, Western Avenue and Blackstone Street (West Block) and the second bounded by Blackstone Street, Western Avenue and Putnam Avenue (East Block).

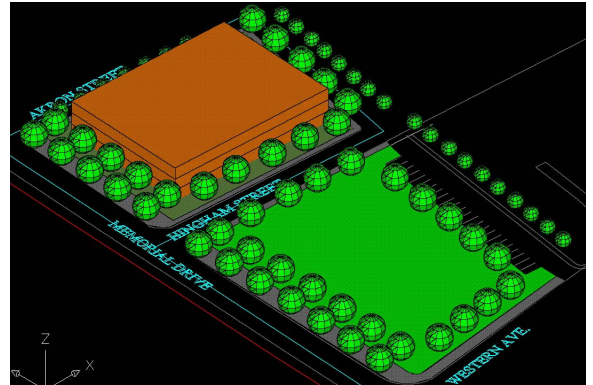


Figure 1.19 Open space and institutional use

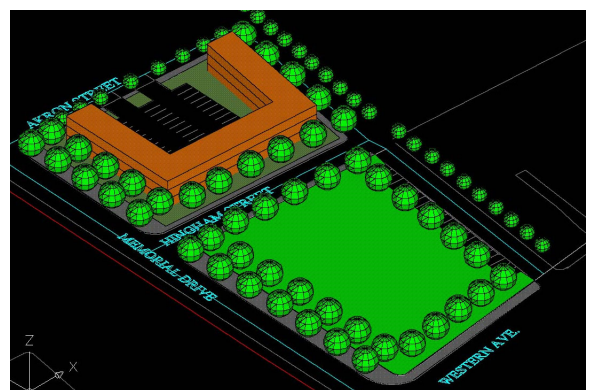


Figure 1.20 Open space and housing

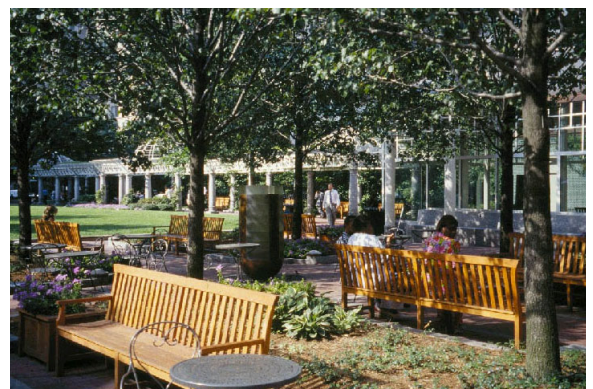


Figure 1.21 Example of open space use

(See Figure 1.22: Aerial view of NStar site.) There is a wide variety of building types on the West Block: the Power Plant; a low hip-roofed building located on Western Avenue; a four-story office building on Blackstone Street; and numerous lower buildings scattered over the site. (See Figures 1.23: Power Plant; and 1.24 Office building on Putnam



Figure 1.22 Aerial view of NStar site

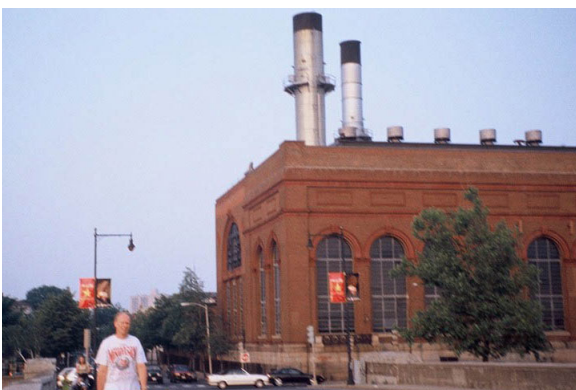


Figure 1.23 Power Plant

Avenue.) There is one major building on the East Block: the Switch Building. (See Figure 1.25: Switch Building.) Three of the buildings may have historic merit: the Power Plant, the hip-roofed building on Western Avenue and the Switch Building. With the exception of the Power Plant, buildings on the site appear to be entirely or nearly vacant.

The Power Plant supplies heat to 200 Harvard buildings in Cambridge and Allston. Harvard recently agreed to buy the plant from NStar for \$14.6 million, subject to state regulatory approval. NStar will operate the plant for one year, at which time Harvard will assume operations. The Committee has raised concerns regarding the pollution generated currently from the stacks and has requested that the new owners address these problems once they complete the purchase of the site.



Figure 1.24 Office building on Putnam Avenue



Figure 1.25 Switch Building

The West Block of the NStar site is presently zoned O -3, which allows buildings up to 120' high and an FAR of 3. Allowed use categories are residential and office. The West Block is located outside the Institutional Overlay District, but, because of its present zoning, special restrictions on institutional uses that can apply to areas outside the Overlay District do not apply.

The East Block is currently zoned C -1, which allows buildings up to 35' and an FAR of 0.75. Allowed use is residential. This portion also lies outside the Institutional Overlay District and, because it is zoned C -1, special regulations limit institutional uses.

The consultant team investigated several reuse possibilities for the site. These included:

- Existing buildings adaptively reused for housing



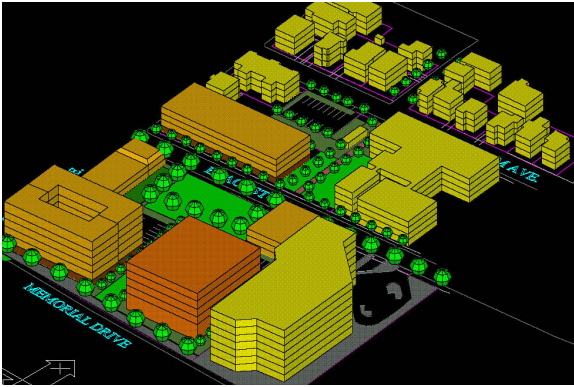


Figure 1.26 All housing option

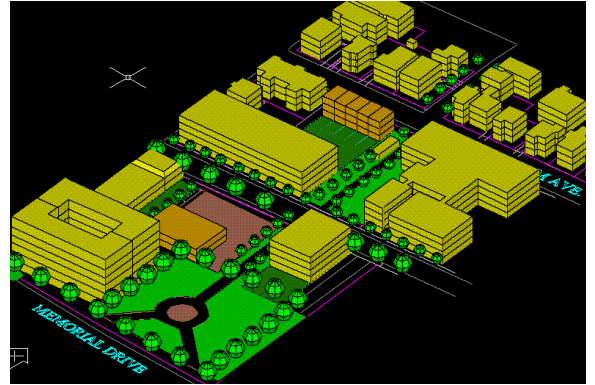


Figure 1.28 Office/housing option

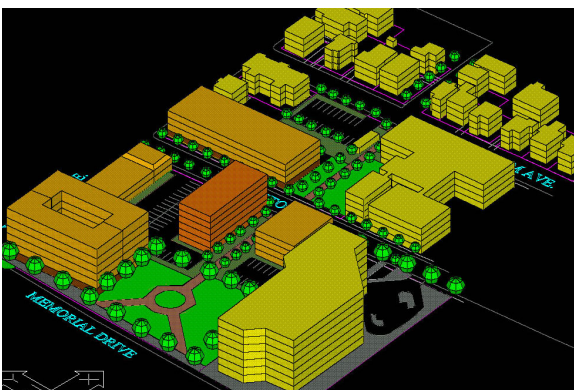


Figure 1.27 Open space/housing option

- Major open space with some existing buildings adaptively reused for housing
- New office building with some existing buildings adaptively reused for housing (See Figures 1.26: All-housing option; 1.27: Open space/housing option and 1.28: Office/housing option.) Additional alternatives can be found in Appendix D.

The NStar site is not well served by public transit. The closest T station is at Central Square, a twelve-minute walk (.6 miles). Nearby buses on Western Avenue and River Street do not run frequently. An office development on the site would very likely need to provide for significant parking on-site. Massing studies revealed that, without demolishing one of the three structures deemed to have historic merit, it would be difficult (or impossible) to provide an efficient parking structure on the site. The office option does not, therefore, appear to be like-

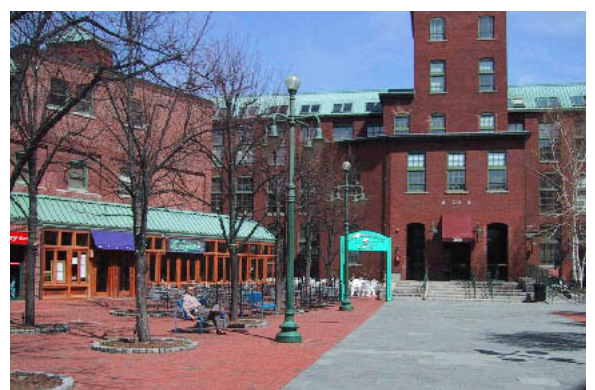


Figure 1.29 Example of adaptive reuse

ly. (Continued use of the Harvard-owned surface lot opposite the site could provide some parking.)

The City has in its zoning code a special provision for the conversion of non-residential buildings to residential use. This provision obviates the FAR limitation for such projects, so long as the floor area is contained within existing structures. It appears that this would be an attractive option for the NStar site in that it would allow significant floor area, even if, as is likely, not all buildings on the site prove to be good candidates for reuse. Floor plates in the Switch Building, the hip-roofed building on Western Avenue and the existing office building on Blackstone Street are well proportioned for housing. If the generation facility in the Power Plant structure were ever phased out, that building could potentially also be adaptively reused. A housing scheme organized around an atrium is a possible

option, subject to further study. (See Figure 1.29: Example of adaptive reuse.)

Some Committee members have advocated a selected mix of uses on the site, including artists' studios, galleries and other art-related activities. If small commercial uses were located on Blackstone Street, they would not face or abut existing residential areas.

**1.12 Banks, Grant, Athens, Cowperthwaite Streets.** This site is located in the Residential Core of the neighborhood adjacent to Harvard housing. It includes: the entire block bounded by Mt. Auburn, Banks, Grant and Athens streets; the eastern part of the block bounded by Mt. Auburn, Athens, Grant and DeWolfe Streets; and the eastern part of the block bounded by Grant, Banks, Cowperthwaite and DeWolfe streets. (See Figure 1.30: Axonometric of Banks, Grant, Athens, Cowperthwaite) Existing development consists of freestanding residential structures, most dating from the 19th centu-

ry. A number of parcels are owned by Harvard University, some of which serve as parking lots. (See Figure 1.31: Property owned by Harvard University, ca. 2001.) All three portions of the site are presently zoned C -3, which allows buildings up to 120' and an FAR of 3. Only the portion of the site bounded by Grant, Banks and Cowperthwaite lies within the Harvard University Overlay District. Because of its current C -3 zoning, special restrictions on institutional uses do not apply to areas of the site located outside the Overlay District.

Beginning in 1999, the University engaged nearby residents in a discussion of potential development of its parcels. Through these discussions the University identified that the most appropriate use for the parcels would be graduate student and affiliate housing. Members of the Riverside Committee expressed clear concern and opposition to undergraduate housing. Discussions have since continued within the context of the



*Figure 1.30 Axonometric of Banks, Grant, Athens & Cowperthwaite (Map courtesy of Tom Kane)*



present Riverside Study. Critical remaining issues related to this potential development are two:

- Building height
- Building footprint

Existing building heights in the vicinity of the site are typically 35'. Residents want future development to conform to this height. Harvard suggested that heights of new buildings on Cowperthwaite be 65' to relate to the heights of existing buildings on Cowperthwaite. Harvard also suggested that new buildings on Grant Street to the west be 45' high, in order to form a transition from the higher buildings to the 35' height that is typical for existing buildings on the remainder of the site. A majority of the Committee did not agree with Harvard's rationale that new buildings on Cowperthwaite should be 65' tall to relate to existing buildings on Cowperthwaite, nor accept the need for a "transition" from existing institutional higher buildings to the neighborhood's predominant 35' height. Residents have subsequently proposed a small 45-foot transition zone along a portion of Cowperthwaite Street. They have also proposed that a portion of the block bounded by Grant, Banks, Cowperthwaite and DeWolfe be removed from the Institutional Overlay District.

Of the dozen or so developable parcels owned by Harvard there are five contiguous parcels on Grant Street and another five on Cowperthwaite. These parcels are 40' wide; when combined they create 200' long development sites. Current zoning would allow buildings with very long facades. A majority of the Committee expressed a strong preference for smaller individual buildings, each on a 40' to 50' wide parcel. The majority felt this pattern would be sympathetic with the current residential fabric (See Figure 1.33: Preferred development pattern.)



*Figure 1.31 Property owned by Harvard University*



*Figure 1.32 Mather House*



*Figure 1.33 Preferred development pattern*

